

In The Claims:

Please amend the claims as follows:

Claim 1. (Canceled)

Claim 2. (Canceled)

Claim 3. (Currently Amended) A ~~The binding apparatus of claim 2, the sheet folding device~~
~~further including, comprising:~~

a receiving device configured to receive a sheet from outside and convey the sheet;

a sheet folding device configured to fold the sheet conveyed by the receiving device in two
at a center portion thereof in a direction the sheet is conveyed so as to be a folded sheet and convey
the folded sheet with the folded portion thereof being a leading edge of the folded sheet;

a jogging device including a jogging table, configured to receive and jog the folded sheet,
conveyed by the sheet folding device, one after another, so as to be stacked into a stack of folded
sheets on the jogging table;

a binding device configured to bind the stack of folded sheets stacked on the jogging table
at an edge portion of the stack of folded sheets at the side where the folded portion of each folded
sheet of the stack of folded sheets is located;

a discharging device configured to discharge the bound stack of folded sheets;

a controller to control an operation of the apparatus, the controller receiving information on

a size of the sheet conveyed from outside;

a guiding device configured to guide the sheet conveyed by the receiving device and a sheet folding/pressing device configured to fold the sheet conveyed by the receiving device and press the folded sheet, the guiding device comprising a stopping device configured to stop the sheet being conveyed by the receiving device to be conveyed,

wherein a position the stopping device stops the sheet to be conveyed is set by the controller according to the information on the size of the sheet so that the sheet is folded at the center portion of the sheet by the sheet folding/pressing device, and

wherein the sheet being conveyed by the receiving device is stopped to be conveyed by the stopping device, so that the center portion of the sheet is downwardly slackened, the slackened centered portion of the sheet is pinched into the sheet folding/pressing device, and thereby the sheet is folded in two at the center portion thereof by the sheet folding/pressing device; and

a detect device configured to detect a leading edge of the sheet guided by the guiding device, a pushing device configured to push the slackened center portion of the sheet toward the sheet folding/pressing device, and a pushing device moving device configured to move the pushing device downwardly toward the sheet folding/pressing device so as to push the slackened center portion of the sheet toward the folding/pressing device and upwardly so as to separate from the sheet folding/pressing device,

wherein the pushing device moving device moves the pushing device downwardly to push the slackened center portion of the sheet toward the sheet folding/pressing device at a predetermined timing after detection of the leading edge of the sheet with the detect device, so that the slackened

center portion of the sheet is pushed by the pushing device so as to be pinched into and thereby the sheet is folded in two at the center portion thereof by the sheet folding/pressing device.

Claim 4. (Original) The binding apparatus of Claim 3,

the pushing device including a saw-toothed knife to push the center portion of the sheet, so that the sheet is perforated at the pushed center portion of the sheet when the saw-toothed knife pushes the center portion of the sheet.

Claim 5. (Currently Amended) A ~~The~~ binding apparatus of Claim 1, the sheet folding device including, comprising:

a receiving device configured to receive a sheet from outside and convey the sheet;

a sheet folding device configured to fold the sheet conveyed by the receiving device in two at a center portion thereof in a direction the sheet is conveyed so as to be a folded sheet and convey the folded sheet with the folded portion thereof being a leading edge of the folded sheet;

a jogging device including a jogging table, configured to receive and jog the folded sheet, conveyed by the sheet folding device, one after another, so as to be stacked into a stack of folded sheets on the jogging table;

a binding device configured to bind the stack of folded sheets stacked on the jogging table at an edge portion of the stack of folded sheets at the side where the folded portion of each folded sheet of the stack of folded sheets is located;

a discharging device configured to discharge the bound stack of folded sheets; and

a sheet folding/pressing device having a pair of sheet folding rollers and a pair of supplementary pressing rollers,

wherein the pair of supplementary pressing rollers is arranged downstream of the pair of sheet folding rollers in the direction the folded sheet is conveyed and is angled relative to the pair of sheet folding rollers, and

wherein a distance between a nip portion of the pair of supplementary rollers and a nip portion of the pair of the sheet folding rollers at a position corresponding to a widthwise edge of the folded sheet, at a side of a widthwise direction where the pair of the supplementary rollers and the pair of sheet folding rollers are farther separated from each other, is shorter than a length of the folded sheet in the direction the folded sheet is conveyed.

Claim 6. (Currently Amended) A The binding apparatus of Claim 1, further comprising:

a receiving device configured to receive a sheet from outside and convey the sheet;

a sheet folding device configured to fold the sheet conveyed by the receiving device in two at a center portion thereof in a direction the sheet is conveyed so as to be a folded sheet and convey the folded sheet with the folded portion thereof being a leading edge of the folded sheet;

a jogging device including a jogging table, configured to receive and jog the folded sheet, conveyed by the sheet folding device, one after another, so as to be stacked into a stack of folded sheets on the jogging table;

a binding device configured to bind the stack of folded sheets stacked on the jogging table at an edge portion of the stack of folded sheets at the side where the folded portion of each folded sheet

of the stack of folded sheets is located;

a discharging device configured to discharge the bound stack of folded sheets; and

a controller to control an operation of the apparatus, the controller receiving information on a size of the sheet conveyed from outside,

wherein the jogging device includes a leading edge stopping device configured to stop the folded sheet to be conveyed at the leading edge thereof, and a left side jogging device configured to jog the folded sheet with respect to a left side of the folded sheet in a direction the folded sheet is conveyed, a right side jogging device configured to jog the folded sheet with respect to a right side of the folded sheet, and a rear side jogging device configured to jog the folded sheet with respect to a rear side of the folded sheet, each including an upper guide member to guide the folded sheet being conveyed by the sheet folding device toward the jogging table and a jogging member to jog the folded sheets on the jogging table,

wherein the upper guide member of each of the left side, right side and rear side jogging devices is configured to swing between a horizontal position where the upper guide member is substantially horizontal so as to hold down a previously conveyed folded sheet on the jogging table and so that the folded sheet being conveyed by the sheet folding device slides over an upper surface of the upper guide member to be stopped by the leading edge stopping device and a slanted position where the upper guide member is upwardly slanted,

wherein each of the left side, right side and rear side jogging devices is configured to move to a first position where the upper guide member thereof in the horizontal position separates from the folded sheet carried on the upper surfaces of the upper guide members of the left side, right side and

rear side jogging devices and to a second position where the jogging member thereof is in a position corresponding to a size of the folded sheet being conveyed by the folding device, which is determined by the controller according to the information on the size of the sheet, and

wherein, when the folded sheet is conveyed to the jogging device by the sheet folding device, each of the left side, right side and rear side jogging devices is in the second position and the upper guide member of each of the left side, right side and rear side jogging devices is in the horizontal position.

Claim 7. (Original) The binding apparatus of Claim 6,

wherein, after the folded sheet has been conveyed by the folding device to the jogging device so as to slide over the upper surfaces of the upper guide members of the left side, right side and rear side jogging devices, each of the left side, right side and rear side jogging devices moves, with the upper guide member thereof kept in the horizontal position, to the first position, where the upper guide member of each of the left, right and rear side jogging devices is swung to the slanted position, and each of the left, right and rear sides jogging devices is then moved to the second position, where the upper guide member of each of the left side, right side and rear side jogging devices is returned to the horizontal position.

Claim 8. (Original) The binding apparatus of Claim 6,

wherein the leading edge stopping device including a leading edge binding position adjusting device configured to change a position the leading edge

stopping device stops the folded sheet to be conveyed so that a position in the folded sheet relative to the leading edge thereof where the binding device binds the folded sheet is changed.

Claim 9. (Original) The binding apparatus of Claim 6,

wherein the folding device includes a detect device configured to detect that the folded sheet is discharged toward the jogging device, and

wherein the jogging device includes a sheet center thrusting device configured to swing between a horizontal position to downwardly thrust the folded sheet carried on the upper surfaces of the upper guide members of the left side, right side and rear side jogging devices and a slanted position where the sheet center thrusting device is upwardly slanted, and a sheet center thrusting device driving device configured to drive the sheet center thrusting device so as to swing between the horizontal position and the slanted position.

Claim 10. (Original) The binding apparatus of Claim 9,

wherein the sheet center thrusting device driving device drives the sheet center thrusting device downwardly to move to the horizontal position so as to downwardly thrust the folded sheet carried on the upper surfaces of the upper guide members of the left side, right side and rear side jogging devices, after the detect device detects that the folded sheet has been discharged toward the jogging device, and to swing back to the slanted position, after each of the left side, right side and rear side jogging devices in the second position moves toward outside to the first position, moves again toward inside to the second position after the upper guide member of each of the left side, right side

and rear side jogging devices is swung to the slanted position, stops at the second position, and the upper guide member of each of the left side, right side and rear side jogging devices is swung to the horizontal position.

Claim 11. (Original) The binding apparatus of Claim 9,
wherein when the binding device binds the stack of folded sheets stacked on the jogging table, the jogging member of each of the left side, right side and rear side jogging devices is in the second position, the upper guide member of each of the left side, right side and rear side jogging devices is in horizontal position, and the sheet center thrusting device is in the horizontal position.

Claim 12. (Cancelled)

Claim 13. (Cancelled)

Claim 14. (Original) A sheet folding apparatus, comprising:

- a pair of sheet folding rollers; and
- a pair of supplementary pressing rollers,

wherein the pair of supplementary pressing rollers is arranged downstream of the pair of sheet folding rollers in a sheet conveyance direction and is angled relative to the pair of sheet folding rollers, and a distance between a nip portion of the pair of supplementary rollers and a nip portion of the pair of the sheet folding rollers at a position corresponding to a widthwise edge of the sheet, at

a side of a widthwise direction where the pair of the supplementary rollers and the pair of sheet folding rollers are farther separated from each other, is shorter than a length of the folded sheet in the sheet feeding direction, and

wherein a portion of a sheet is pinched into the pair of sheet folding rollers so that the sheet is folded in two by the pair of sheet folding rollers, and then the folded sheet is pressed by the pair of supplementary pressing rollers, so that the folded portion of the folded sheet is firmly folded.

Claim 15. (Original) A jogging apparatus, comprising:

a jogging table on which a sheet may be stacked one after another;

a leading edge stopping device configured to stop a sheet conveyed from outside at a leading edge thereof;

a left side jogging device configured to jog the sheet with respect to a left side of the sheet in a direction the sheet is conveyed;

a right side jogging device configured to jog the sheet with respect to a right side of the sheet; and

a rear side jogging device configured to jog the sheet with respect to a rear side of the sheet, wherein each of the left side, right side, and rear side jogging devices includes an upper guide member to guide the sheet conveyed from outside onto the jogging table one after another so as to be stacked into a stack of sheets on the jogging table and a jogging member to jog the stack of sheets on the jogging table,

wherein the upper guide member of each of the left side, right side and rear side jogging

devices is configured to swing between a horizontal position where the upper guide member is substantially horizontal so as to hold down a previously conveyed sheet on the jogging table and so that the sheet being conveyed from outside slides over an upper surface of the upper guide member to be stopped by the leading edge stopping device and a slanted position where the upper guide member is upwardly slanted,

wherein each of the left side, right side and rear side jogging devices is configured to move to a first position where the upper guide member thereof in the horizontal position separates from the sheet carried on the upper surfaces of the upper guide members of the left side, right side and rear side jogging device and to a second position where the jogging member thereof is in a position corresponding to a size of the sheet being conveyed from outside, and

wherein, when the sheet is conveyed, each of the left side, right side and rear side jogging devices is in the second position and the upper guide member of each of the left side, right side and rear side jogging devices is in the horizontal.

Claim 16. (Original) The jogging apparatus of Claim 15,

wherein, after the sheet has been conveyed so as to slide over the upper surfaces of the upper guide members of the left side, right side, and rear side jogging devices, each of the left side, right side and rear side jogging devices moves, with the upper guide member thereof kept in the horizontal position, to the first position, where the upper guide member of each of the left side, right side and rear side jogging devices is swung to the slanted position, and each of the left side, right side and rear side jogging devices is then moved to the second position, where the upper guide member of each of

the left side, right side and rear side jogging devices is returned to the horizontal position.

Claim 17. (Original) The jogging apparatus of Claim 15, further including:

a detect device configured to detect that the sheet has been received;

a sheet center thrusting device configured to swing between a horizontal position to downwardly thrust the sheet carried on the upper surfaces of the upper guide members of the left side, right side and rear side jogging device and a slanted position where the sheet center thrusting device is upwardly slanted; and

a sheet center thrusting device driving device configured to drive the sheet center thrusting device so as to swing between the horizontal position and the slanted position.

Claim 18. (Currently Amended) The jogging apparatus of Claim 17,

wherein the sheet center thrusting device driving device drives the sheet center thrusting device downwardly to move to the horizontal position so as to downwardly thrust the sheet ~~carrie~~ carried on the upper surfaces of the left side, right side and rear side jogging devices, after the detect device detects that the sheet has been conveyed, and to swing back to the slanted position, after each of the left side, right side and rear side jogging devices in the second position moves toward outside to the first position, moves again toward inside to the second position after the upper guide member of each of the ~~left~~ left side, right side, and rear side jogging devices is swung to the slanted position, stops at the second position, and the upper guide member of each of the left side, right side, and rear side jogging devices is swung to the horizontal position.

Claim 19. (Original) The jogging apparatus of Claim 15, the leading edge stopping device including a leading edge binding position adjusting device configured to change a position the leading edge stopping device stops the sheet to be conveyed so that a position in the sheet relative to the leading edge thereof where a binding device binds the sheet is changed.

Claim 20. (Canceled)

Claim 21. (Canceled)

Claim 22. (Currently Amended) A The sheet folding and jogging apparatus of Claim 21, the sheet folding device further including, comprising:

a receiving device configured to receive a sheet from outside and convey the sheet;

a sheet folding device configured to fold the sheet conveyed by the receiving device in two at a center portion thereof in a direction the sheet is conveyed so as to be a folded sheet and convey the folded sheet with the folded portion thereof being a leading edge of the folded sheet;

a jogging device including a jogging table, configured to receive and jog the folded sheet, conveyed by the sheet folding device, one after another, so as to be stacked into a stack of folded sheets on the jogging table;

a controller to control an operation of the apparatus, the controller receiving information on a size of the sheet conveyed from outside,

wherein the sheet folding device includes a guiding device configured to guide the sheet

conveyed by the receiving device, and a sheet folding/pressing device configured to fold the sheet conveyed by the receiving device and press the folded sheet, the guiding device including a stopping device configured to stop the sheet being conveyed by the receiving device to be conveyed,

wherein a position the stopping device stops the sheet to be conveyed is set by the controller according to the information on the size of the sheet so that the sheet is folded at the center portion of the sheet by the sheet folding/pressing device, and

wherein the sheet being conveyed by the receiving device is stopped to be conveyed by the stopping device, so that the center portion of the sheet is downwardly slackened, the slackened centered portion of the sheet is pinched into the sheet folding/pressing device, and thereby the sheet is folded in two at the center portion thereof by the sheet folding/pressing device;

a detect device configured to detect a leading edge of the sheet guided by the guiding device;

a pushing device configured to push the slackened center portion of the sheet toward the sheet folding/pressing device; and

a pushing device moving device configured to move the pushing device downwardly toward the sheet folding/pressing device so as to push the slackened center portion of the sheet toward the folding/pressing device and upwardly so as to separate from the sheet folding/pressing device,

wherein the pushing device moving device moves the pushing device downwardly to push the slackened center portion of the sheet toward the sheet folding/pressing device at a predetermined timing after detection of the leading edge of the sheet with the detect device, so that the slackened center portion of the sheet is pushed by the pushing device so as to be pinched into and thereby the

sheet is folded in two at the center portion of the sheet by the sheet folding/pressing device.

Claim 23. (Original) The sheet folding and jogging apparatus of Claim 22, the pushing device including a saw-toothed knife to push the center portion of the sheet, so that the sheet is perforated at the pushed center portion of the sheet when the saw-toothed knife pushes the center portion of the sheet.

Claim 24. (Currently Amended) A The sheet folding and jogging apparatus of Claim 21, the sheet folding device including, comprising:
a receiving device configured to receive a sheet from outside and convey the sheet;
a sheet folding device configured to fold the sheet conveyed by the receiving device in two at a center portion thereof in a direction the sheet is conveyed so as to be a folded sheet and convey the folded sheet with the folded portion thereof being a leading edge of the folded sheet;
a jogging device including a jogging table, configured to receive and jog the folded sheet, conveyed by the sheet folding device, one after another, so as to be stacked into a stack of folded sheets on the jogging table; and

a sheet folding/pressing device having a pair of sheet folding rollers and a pair of supplementary pressing rollers,

wherein the pair of supplementary pressing rollers is arranged downstream of the pair of sheet folding rollers in the direction the folded sheet is conveyed and is angled relative to the pair of sheet folding rollers, and

wherein a distance between a nip portion of the pair of supplementary rollers and a nip portion of the pair of the sheet folding rollers at a position corresponding to a widthwise edge of the sheet, at a side of a widthwise direction where the pair of the supplementary rollers and the pair of sheet folding rollers are farther separated from each other, is shorter than a length of the folded sheet in the direction the folded sheet is conveyed.

Claim 25. (Currently Amended) ~~A The sheet folding and jogging apparatus of Claim 21,~~
~~further~~ comprising:

a receiving device configured to receive a sheet from outside and convey the sheet;

a sheet folding device configured to fold the sheet conveyed by the receiving device in two at a center portion thereof in a direction the sheet is conveyed so as to be a folded sheet and convey the folded sheet with the folded portion thereof being a leading edge of the folded sheet;

a jogging device including a jogging table, configured to receive and jog the folded sheet, conveyed by the sheet folding device, one after another, so as to be stacked into a stack of folded sheets on the jogging table;

a controller to control an operation of the apparatus, the controller receiving information on a size of the sheet conveyed from ~~outside,~~ outside; and

~~wherein the jogging device includes~~ a leading edge stopping device configured to stop the folded sheet to be conveyed at a leading edge thereof, and a left side jogging device configured to jog the folded sheet with respect to a left side of the folded sheet in a direction the folded sheet is conveyed, a right side jogging device configured to jog the folded sheet with respect to a right side

of the folded sheet, and a rear side jogging device configured to jog the folded sheet with respect to a rear side of the folded sheet, each including an upper guide member to guide the folded sheet being conveyed by the sheet folding device toward the jogging table and a jogging member to jog the folded sheets on the jogging table,

wherein the upper guide member of each of the left side, right side and rear side jogging devices is configured to swing between a horizontal position where the upper guide member is substantially horizontal so as to hold down a previously conveyed folded sheet on the jogging table and so that the folded sheet being conveyed by the sheet folding device slides over an upper surface of the upper guide member to be stopped by the leading edge stopping device and a slanted position where the upper guide member is upwardly slanted,

wherein each of the left side, right side and rear side jogging devices is configured to move to a first position where the upper guide member thereof in the horizontal position separates from the folded sheet carried on the upper surfaces of the upper guide member of the left side, right side and rear side jogging devices and to a second position where the jogging member is in a position corresponding to a size of the folded sheet being conveyed by the folding device, which is determined by the controller according to the information on the size of the sheet, and

wherein, when the folded sheet is conveyed to the jogging device by the sheet folding device, each of the left side, right side and rear side jogging devices is in the second position and the upper guide member of each of the left side, right side and rear side jogging devices is in the horizontal position.

Claim 26. (Original) The sheet folding and jogging apparatus of Claim 25,

wherein, after the folded sheet has been conveyed by the folding device to the jogging device so as to slide over the upper surfaces of the upper guide members of the left, right, and rear side jogging devices, each of the left, right, and rear side jogging devices moves, with the upper guide member thereof kept in the horizontal position, to the first position, where the upper guide member of each of the left, right, and rear sides jogging devices is swung to the slanted position, and each of the left side, right side, and rear side jogging devices is then moved to the second position, where the upper guide member of each of the left side, right side, and rear side jogging devices is returned to the horizontal position.

Claim 27. (Original) The sheet folding and jogging apparatus of Claim 25,

wherein the folding device includes a detect device configured to detect that the folded sheet is discharged toward the jogging device, and

wherein the jogging device includes a sheet center thrusting device configured to swing between a horizontal position to downwardly thrust the folded sheet carried on the upper surfaces of the upper guide members of the left side, right side and rear side jogging devices and a slanted position where the sheet center thrusting device is upwardly slanted, and a sheet center thrusting device driving device configured to drive the sheet center thrusting device so as to swing between the horizontal position and the slanted position.

Claim 28. (Original) The sheet folding and jogging apparatus of Claim 27,

wherein the sheet center thrusting device driving device drives the sheet center thrusting device downwardly to move to the horizontal position so as to downwardly thrust the folded sheet carried on the upper surfaces of the upper guide members of the left side, right side and rear side jogging devices, after the detect device detects that the folded sheet has been discharged toward the jogging device, and to swing back to the slanted position, after each of the left side, right side, and rear side jogging devices in the second position moves toward outside to the first position, moves again toward inside to the second position after the upper guide member of each of the left side, right side and rear side jogging devices is swung to the slanted position, and stops at the second position, and the upper guide member of each of the left side, right side and rear side jogging devices is swung to the horizontal position.

Claims 29 - 31. (Canceled)

Claim 32. (Currently Amended) A jogging apparatus, comprising:

a jogging table on which a sheet may be stacked one after another;

leading edge stopping means for stopping a sheet conveyed from outside at a leading edge thereof;

left side jogging means for jogging the sheet with respect to a left side of the sheet in a direction the sheet is conveyed;

right side jogging means for jogging the sheet with respect to a right side of the sheet; and

rear side jogging means for jogging the sheet with respect to a rear side of the sheet,

wherein each of the left side, right side, and rear side jogging means includes upper guiding means for guiding the sheet conveyed from outside onto the jogging table one after another so as to be stacked into a stack of sheets on the jogging table and jogging means for jog the stack of sheets stacked on the jogging table,

wherein the upper guiding means of each of the left side, right side and rear side jogging means is configured to swing between a horizontal position where the upper guiding means is substantially horizontal so as to hold down a previously conveyed sheet on the jogging table and so that the sheet conveyed from outside slides over an upper surface of the upper guiding means to be stopped by the leading edge stopping means and a slanted position where the upper guiding means is upwardly slanted,

wherein each of the left side, right side and rear side jogging means is configured to move to a first position where the upper guiding means in the horizontal position separates from the folded sheet carried on the upper surfaces of the upper guide members of the left side, right side and rear side jogging means and to a second position where the jogging means is in a position corresponding to a size of the sheet being ~~conveyed~~ conveyed from outside, and

wherein, when the sheet is received, each of the left side, right side and rear side jogging means is in the second position and the upper guiding means of each of the left side, right side and rear side jogging means is in the horizontal position.

Claims 33 - 53. (Canceled)